

Next State: Full Truth Table

Cur- rent State	Inputs				Next State	
	T	B	E	G		
0 0	0	0	0	0		
0 0	0	0	0	1		
0 0	0	0	1	0		
0 0	0	0	1	1		
0 0	0	1	0	0		
0 0	0	1	0	1		
0 0	0	1	1	0		
0 0	0	1	1	1		
0 0	1	0	0	0		
0 0	1	0	0	1		
0 0	1	0	1	0		
0 0	1	0	1	1		
0 0	1	1	0	0		
0 0	1	1	0	1		
0 0	1	1	1	0		
0 0	1	1	1	1		
0 1	0	0	0	0		
0 1	0	0	0	1		
0 1	0	0	1	0		
0 1	0	0	1	1		
0 1	0	1	0	0		
0 1	0	1	0	1		
0 1	0	1	1	0		
0 1	0	1	1	1		
0 1	1	0	0	0		
0 1	1	0	0	1		
0 1	1	0	1	0		
0 1	1	0	1	1		
0 1	1	1	0	0		
0 1	1	1	0	1		
0 1	1	1	1	0		
0 1	1	1	1	1		

Cur- rent State	Inputs				Next State	
	T	B	E	G		
1 0	0	0	0	0		
1 0	0	0	0	1		
1 0	0	0	1	0		
1 0	0	0	1	1		
1 0	0	1	0	0		
1 0	0	1	0	1		
1 0	0	1	1	0		
1 0	0	1	1	1		
1 0	1	0	0	0		
1 0	1	0	0	1		
1 0	1	0	1	0		
1 0	1	0	1	1		
1 0	1	1	0	0		
1 0	1	1	0	1		
1 0	1	1	1	0		
1 0	1	1	1	1		
1 1	0	0	0	0		
1 1	0	0	0	1		
1 1	0	0	1	0		
1 1	0	0	1	1		
1 1	0	1	0	0		
1 1	0	1	0	1		
1 1	0	1	1	0		
1 1	0	1	1	1		
1 1	1	0	0	0		
1 1	1	0	0	1		
1 1	1	0	1	0		
1 1	1	0	1	1		
1 1	1	1	0	0		
1 1	1	1	0	1		
1 1	1	1	1	0		
1 1	1	1	1	1		

Next State: Compressed Truth Table

Cur- rent State	Inputs				Next State	
	T	B	E	G		

Output: Full Truth Table

Cur- rent State		Out- puts	
		U	D
0	0		
0	1		
1	0		
1	1		